MULTIPLE SCLEROSIS—A Reappraisal—Douglas Mc-Alpine, M.D.(Glasg.), F.R.C.P., Emeritus Consultant to the Middlesex Hospital; Honorary Consultant Physician to Maida Vale Hospital; Charles E. Lumsden, M.D. (Aberd.), F. C. Path., Professor of Pathology, University of Leeds; Late Sir Henry Head Research Fellow of the Royal Society and Rockefeller Traveling Research Fellow in Medicine, Columbia University, New York; and E. D. Acheson, M.A., D.M.(Oxon.), M.R.C.P., First Assistant Nuffield Department of Clinical Medicine, University of Oxford; Medical Director Oxford Record Linkage Study. Williams and Wilkins Company, Baltimore, Md., 165. 415 pages, \$10.75.

This monograph is presented in three parts. Part 1 is brief, a total of 34 pages dealing with the epidemiology of multiple sclerosis (M.S.). The next part of 170 pages is primarily a division of the previous monograph on M.S. by Dr. McAlpine and presents the clinical aspects of this disorder, including the natural history, early signs and symptoms, diagnostic criteria, course and prognosis and treatment. The remaining part deals with the clinical pathology of multiple sclerosis exhaustively discussing cerebrospinal fluid, cytology and proteins, amino acid, carbohydrate metabolism and enzymes in M.S. and the chemical pathology of lipids in demyelinating disease, with a final chapter in which the question of multiple sclerosis as an immunological disorder is examined and presented. This last part does not, in fact, deal in any way with the pathology and pathogenesis of multiple sclerosis. This new major part concerned with clinical pathology is the important addition to the old monograph. It reviews the vast literature on M.S. and states and analyzes the current concepts and modes of approach to the fundamental pathogenesis of this disorder.

As the book is essentially in two parts, one clinical and the other laboratory, it has appeal to both the clinician and the laboratory and research worker in M.S. It is also an important reference text. Thus, while one worker may be interested in the observation that critical flicker fusion frequency may be lower in pallor of the optic nerves, and another in the probable site of production of antibodies in M.S., the practicing physician may have an interest in the probability whether a patient suspected of multiple sclerosis, who has 40 or 50 cells in his CSF or a protein of over 120 mg, has multiple sclerosis. Equally, the treating physician may find here the answer to such questions as what is the effect of trauma on multiple sclerosis, what is the place of ACTH in the treatment of acute attacks, and what is the value and method of intrathecal phenol for spasticity? It should be noted that like most monographs, the subject index may be lacking, and this is so here. Thus, one cannot find phenol in the subject index, although it is dealt with comprehensively in the text.

This is indeed an excellent, careful presentation of major importance and interest to physicians and laboratory workers.

DONALD MACRAE, M.D.

ENGLISH MEDICAL HUMANISTS, THOMAS LIN-ACRE AND JOHN CAIUS—Logan Clendening Lectures on the History and Philosophy of Medicine: Twelfth Series -C.D. O'Malley. The University of Kansas Press, Lawrence, Kansas, 1965. 54 pages, \$2.00.

For many years the anual lecturer has paid tribute to the late Dr. Logan Clendening, a generous physician whose scholarly spirit has done much to foster the humanities and the history of medicine at the University of Kansas. The present essayist, Professor of the History of Medicine at the University of California, Los Angeles, has chosen as his topic for the occasion, the development of medical humanism in England. This he has done by presenting two brief sketches on the life and work of the well-known

medical humanists, Thomas Linacre (c. 1460-1524) and John Caius (or Keys) (1510-1573), presumptively since they represent the beginning and the end of an era.

The essayist gives a straight-forward and easily readable, if somewhat pedestrian, account of the known facts concerning Linacre and Caius and their contributions to the revival of classical medicine, notably Galenism, through improved translations from the Greek texts.

The humanistic movement had its origins in Italy during the late fourteenth and early fifteenth centuries. It was essentially a literary movement initiated by the enthusiasms engendered by the re-discovery of the ancient manuscripts and especially for the study of Greek aroused by Manuel Choysoloras (c. 1350-1445), called 'litterarum Graecarum restituor,' and Theodorus Gaza (c. 1398-1478). The humanistic movement invaded medicine comparatively late during the latter part of the fifteenth and first half of the sixteenth century. The movement sought a return to classical ideals and form and was, in essence, a reactionary movement. In its application to medicine it did much to clear away the accrued dross of mediaevalism and further, set the stage for the future. However, owing to its over-emphasis on Galen and Hippocrates and its literary nature, the humanistic movement was highly restrictive to the development of the physician, as distinct from the surgeon, by destroying his scientific objectivity.

In England humanism had its initial center at Oxford through the efforts of Latimer, Linacre, Grocyn, More and Colet, to pass much later, at the end of the first-quarter of the sixteenth century, to Cambridge. At Cambridge the College of St. John, under the guidance of its master, Nicholas Metcalfe, became celebrated as the seat of the new learning and of great influence upon the intellectual life of that university's graduates such as John Caius. The selection by the author of Linacre and Caius as representative of English medical humanism was an obvious choice since they were the only major figures in the movement. This choice should have provided the author with an opportunity of contrasting and comparing the distinctive traditions of Oxford and Cambridge in English medicine and their influence on Linacre and Caius.

In addition, the author has failed to examine the important relationship and contrasts between the graduates of the universities and the membership of the powerful medical guilds. Thus the volume at hand disappointingly lacks substance except for its brief biographical content on the lives of two notable physicians.

COMPARATIVE HEMATOLOGY-Warren Andrew, M.D., Ph.D., Chairman, Department of Anatomy, Indiana, University School of Medicine, Indianapolis, Indiana, Grune & Stratton, New York, 1965. 188 pages, \$22.75.

This book is a comprehensive summing up, stressing morphology of what is known about the blood of invertebrates, fishes, amphibians, reptiles, birds and mammals. Excellent illustrations, including a color atlas section and electron micrographs, appear throughout the book. Many details about blood counts for the various species are given. The book contains many intriguing bits of information, e.g.—Red cell life span in the turtle is about 2 years, bats have red cell count of over 10,000,000, and decreased erythropoiesis in winter; horses show a difference in red cell counts between the sexes, stallions' counts being 40 per cent higher than mares; camels have ovalocytes; the sickle cells in the deer are not associated with hematologic abnormality or disease.

The material is rather far removed from current areas of interest and investigation in hematology, but it is a useful reference for hematologists of catholic interest.

R. O. WALLERSTEIN, M.D.